



TELEPATHOLOGY

Paul A. Fontelo, M.D., M.P.H.
Program Director
Date of Appointment - 15 July 1995

MISSION

The Telepathology Program is a unit of the Center for Advanced Pathology with a mission that parallels that of the Institute—consultation, education, and research.

STAFF

Medical

Paul A. Fontelo, M.D., M.P.H.

Administrative

Daniel R. Butler, HM2, H.T. (ASCP), Systems Administrator
Mark L. Sacks, B.S., Administrative Assistant

CONSULTATION

<i>Cases</i>	<i>Received</i>	<i>Reported</i>
Military	26	26
Federal	20	20
Civilian	9	9

The AFIP Telepathology Program made great strides in extending its accessibility to pathologists worldwide by the opening its service through the Internet. Since July 1995, pathologists all over the world have been able to transmit case consultations through generic file transfer protocol (ftp). Any pathologist with a high-resolution camera, image-capture capability, and Internet connections can transmit consultation cases. The final diagnosis is faxed to the contributor within 24 hours for cases accessioned before 10 a.m. EST. In most instances, the turnaround time has been 2 to 4 hours. Cases can also be transmitted by modem using proprietary systems. Cases have been received from Northern Ireland and South Africa.

Two telepathology systems were installed in Landstuhl Regional Medical Center, in Landstuhl, Germany, and the University of Puerto Rico in San Juan. A live videoconference was held in conjunction with the Puerto Rico visit. Dr. William D. Travis, cochairperson of the Department of Pulmonary and Mediastinal Pathology, and Dr. Charles J. Davis, Jr., deputy chairperson of the Department of Genitourinary Pathology discussed the cases.

Telepathology developed and currently maintains the AFIP World Wide Web (WWW) server (<http://www.afip.mil>). The Web server is one of the AFIP's windows to the world. Since its initial start on August 23, 1995, it has been accessed more than 75,000 times. The majority of the "visits" have been from educational sites, but a significant number have come from military and federal institutions. Foreign accesses have come from 54 countries that have Internet connections.

The WWW server contains schedules of CME courses sponsored by the AFIP. An on-line registration form is linked to the course programs in the "Brochures online" page. Other information (weekly

seminars, listing of personnel, museum information) relevant to the public is also available on the server.

EDUCATION

Continuing medical education courses are the most accessed pages on the AFIP server, accounting for close to 40% of all connections. The Virtual Gastrointestinal Endoscopic Biopsy Course, the first CME offering of the AFIP, has been accredited by the Center for Advanced Medical Education for Category 1 of the Physician's Recognition Award of the American Medical Association. The 20 cases selected by Dr. Leslie H. Sobin, chief, Division of Gastrointestinal Pathology, came from the Gastrointestinal Endoscopic Biopsy Course, which was held at the AFIP in June 1995. Recent additions to the AFIP's virtual course series consist of the "Unusual Tumors and Tumor-like Conditions of the Lung" (content provided by Dr. William D. Travis and developed by Telepathology) from the Pulmonary and Mediastinal Pathology Department and the "Orthopedic Pathology Study Cases." The orthopedic pathology cases were developed by Dr. Robert Wolov, staff pathologist in the Department of Orthopedic Pathology. The Departments of Cellular Pathology and Veterinary Pathology maintain their own WWW servers, with links provided by the main AFIP server. Telepathology assists with the development and formatting of virtual CME courses. More courses are currently being developed.

A biweekly teleconference is held between the National Cancer Center (NCC) in Tokyo, Japan, and various pathology branches of the AFIP. All of the cases so far have involved the Division of Gastrointestinal Pathology and the Department of Pulmonary and Mediastinal Pathology. Drs. Leslie H. Sobin and William D. Travis have discussed the cases from their respective departments. The AFIP takes its turn in showing instructive cases to NCC pathologists.

GOALS

Telepathology projects include: (1) 2-week rotation for Region 1 pathology residents, (2) one-week telepathology tutorial similar to the molecular pathology tutorials cosponsored by the College of American Pathologists, and (3) a telepathology workshop in spring 1997.

PRESENTATIONS

"The Internet and the Pathologist/Telepathology," Maryland Society of Pathology Meeting, Baltimore, Maryland, September 22, 1995.

"Telepathology," President's Cancer Panel, National Institutes of Health, VA Medical Center, Baltimore, Maryland, September 15, 1995.

"Continuing Medical Education on the World Wide Web," Slice of Life Workshop, Vancouver, British Columbia Institute of Technology, Vancouver, British Columbia, Canada, June 21-24, 1995.

"Telemedicine '95," The Pentagon, Alexandria, Virginia, June 5 and 6, 1995.

"Self-Instructional HyperCard-based Pathology Case Discussion Modules with Quizzes and Glossary," Computers in Healthcare Education Symposium, Thomas Jefferson University, Philadelphia, Pennsylvania, April 26-28, 1995.

"Continuing Medical Education on the World Wide Web," National Forum on Telepresence, Image and Information Systems for Military Telemedicine, McLean, Virginia, March 27-29, 1995.

"What Physicians Should Know About the Internet," University of the Philippines Medical Alumni Society in America Annual Spring Meeting, Las Vegas, Nevada, March 23-26, 1995.